

Grocott, Kit

Reference: AP0301



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INTENDED USE AND PRESENTATION:

For *in vitro* diagnostic use.

AP0301. 100 Tests.

APPLICATIONS:

The Grocott (for fungi) kit was designed to demonstrate fungi in tissue sections.

The interpretation of the stain results is the full responsibility of the user. Any experimental result must be confirmed by a medically established diagnostic product or procedure.

PRODUCT COMPOSITION:

The Grocott (for fungi) kit is composed by:

Reagent	Name	Volume	Storage
A	Chromic acid solution	30 mL	15-25 °C
B	Sodium bisulfite solution	30 mL	15-25 °C
C	Methenamine solution	30 mL	2-8 °C
D	Silver nitrate solution	30 mL	2-8 °C
E	Borax solution	30 mL	15-25 °C
F	Gold chloride solution	30 mL	2-8 °C
G	Sodium thiosulfate solution	30 mL	15-25 °C
H	Light green solution	30 mL	15-25 °C

METHODS AND PROCEDURE:

Principles of the method: In most fungi, cell walls are made of chitin, a polymer of N-acetylglucosamine together with polymers of D-glucose and D-mannose, proteins and lipids. Chromic acid reacts with glycolic and glycoaminic groups in polysaccharide chain oxidating them to aldehydic groups and thus, breaking the chain itself. These newlyformed aldehydic groups, reduce silver chloride, which is part of the silver-methenamine complex, to metallic silver and make it visible.

Warning: For good results follow these rules:

- Avoid to infect section and slide with no pathogenic fungi (handle only with gloves, do not expose preparation to air)
- Use always fresh distilled water.
- Use only clean glasswork.
- Avoid deposit of dust on section.
- Avoid contact between solutions and metal objects (tweezers).

Specimen: Paraffin-embedded tissue samples should be used.

Procedure time: 30 minutes.

Staining procedure:

- 1) Deparaffinize and hydrate for paraffin section.
- 2) Put the slide in distilled water.
- 3) Put 2-5 drops of Reagent A and leave to act 10 minutes.
- 4) Rinse in tap water followed by distilled water.
- 5) Put 2 to 5 drops of Reagent B in each preparation for 1 minute to remove any residual chromic acid.
- 6) Rinse in tap water followed by distilled water.
- 7) Prepare working solution: mix 2.5 mL of Reagent C, 2.5 mL of Reagent D and 0.4 mL of Reagent E.
- 8) Incubate with working solution in a water bath at 60 °C for 10 minutes. Check under a microscope for evaluation of silver impregnation. Fungi should be dark brown. If color is not sufficient, return the slide to working solution for 2-3 minutes and check again.
- 9) Wash in distilled water.
- 10) Put 2-5 drops of Reagent F for 30 seconds.
- 11) Wash in distilled water.
- 12) Put 2 -5 drops of Reagent G and leave to act 2 minutes.
- 13) Rinse in tap water followed by distilled water.
- 14) Counterstain with Reagent H from 2 minutes.
- 15) Rinse slide using absolute alcohol.
- 16) Dehydrate, clear in xylene and mount.

See our web site at www.gennova-europe.com for detailed protocols ancillary reagents and support products.



Catalog number



Batch code



In Vitro diagnostic medical device



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Temperature limitation



Expiration date



Test number



Manufacturer



See instruction for use

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EXPECTED RESULTS:

During the reaction of the different solutions of the kit with the tissue sections, resulting in the following stains:

Fungi	Sharply delineated in black
Mucines	Dark grey
Mycelia and hyphae	Gray rose
Background	Green

REQUIRED MATERIALS BUT NOT SUPPLIED:

All reagents, materials, and laboratory equipment for this procedure are not provided with this kit. This includes adhesive slides and cover slips, positive and negative control tissues, xylene or adequate substitute, ethanol, distilled H₂O, pipettes, Coplin jars, glass jars, moist chamber, histological baths, mounting materials, and microscope.

Buffered solutions for and other auxiliary reagents are available from Genova Scientific.

STORAGE AND STABILITY:

After reception, storage the reagent according to temperature indicated on product label until the expiration date printed. Note that some reagents need to be storage 2-8 °C and other to room temperature. Do not use after the expiration date. Keep the containers tightly closed. After the first opening, the product is usable until the expiry date stated on label of intact product. Waste from solutions must be disposed under the procedure of hazardous substance. If the product is stored under different conditions from those stipulated in these technical indications, the new conditions must be verified by the user.

Genova Scientific guarantees that the product will maintain all of the described characteristics from the production date until the expiration date, as long as the product is stored and used as recommended. No other guarantees are provided. Under no circumstances is Genova Scientific obliged to cover damages caused by use of this reagent.

TROUBLESHOOTING:

If unusual staining is observed or any other deviations from the expected results, please read these instructions carefully, and if this does not solve the problem, please contact Genova Scientific's technical support department or your local distributor.

PRECAUTIONS:

Use only by qualified personnel. Read with attention the information written on the label (dangerous symbols, risks and safety phrases). Consult always the safety data sheet (MSDS) where the information about the risks of the preparation, precautionary measures during use, first aid and disposal are available. Use proper protective equipment in order to avoid contact with reagents and samples in the eyes, skin, and mucosal tissues. MSDS is available upon request.

PERFORMANCE CHARACTERISTICS:

Genova Scientific has performed studies to evaluate the functioning of this product, concluding that the product is both specific and sensitive for recommended use.

BIBLIOGRAPHY:

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Temperature limitation



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See instruction for use



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